

AMENDMENT UNDER 37 CFR § 1.111
Application No. 09/903,476

Clean copy of claim 6

6. (Amended) The process of claim 5 wherein contacting the oxygen treated catalyst with the aqueous medium is conducted in the liquid phase.

Clean copy of claim 9

9. (Amended) The process of claim 5 wherein the molecular sieve of the alkylation catalyst is MCM-22, PSH-3, SSZ-25, MCM-36, MCM-49, MCM-56, faujasite, mordenite or zeolite beta.

Clean copy of claim 10

10. (Amended) The process of claim 5 wherein said aqueous medium is ammonium nitrate solution, ammonium carbonate solution or acetic acid solution.

Clean copy of claim 11

11. (Amended) The process of claim 5 wherein contacting the catalyst with the aqueous medium is conducted at a temperature of about 15 to about 120° C for a period of about 10 minutes to about 48 hours.

Clean copy of claim 12

12. (Amended) The process of claim 5 further including calcining the aqueous medium contacted catalyst at a temperature of about 25 to about 600° C for a period of about 10 minutes to about 48 hours.

Please add the following claims 13 to 24:

13. A process for alkylating an aromatic compound comprising:
contacting an alkylatable aromatic compound and an alkylating agent with an alkylation catalyst comprising a molecular sieve under alkylation conditions; and
when said alkylation catalyst has become at least partially deactivated, contacting said alkylation catalyst with an oxygen-containing gas at a temperature of about 120 to about 600° C; and then

AMENDMENT UNDER 37 CFR § 1.111
Application No. 09/903,476

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contacting the oxygen treated catalyst with an aqueous medium selected from ammonium nitrate solution ~~or~~ ammonium carbonate solution. *the group consisting of*

2 14. The process of claim ~~13~~ ² wherein contacting the oxygen treated catalyst with the aqueous medium is conducted in the liquid phase.

3 15. The process of claim ~~13~~ ¹ wherein the alkylating agent includes an alkylating aliphatic group having 1 to 5 carbon atoms.

4 16. The process of claim ~~13~~ ¹ wherein the alkylating agent is ethylene or propylene and the alkylatable aromatic compound is benzene.

5 17. The process of claim ~~13~~ ¹ wherein the molecular sieve of the alkylation catalyst is MCM-22, PSH-3, SSZ-25, MCM-36, MCM-49, MCM-56, faujasite, mordenite or zeolite beta.

6 18. The process of claim ~~13~~ ¹ further including calcining the aqueous medium contacted catalyst at a temperature of about 25 to about 600° C for a period of about 10 minutes to about 48 hours.

508 *C* *3* *7* 19. A process for alkylating an aromatic compound comprising:
contacting an alkylatable aromatic compound and an alkylating agent with an alkylation catalyst comprising a molecular sieve under alkylation conditions; and
when said alkylation catalyst has become at least partially deactivated, contacting said alkylation catalyst with an oxygen-containing gas at a temperature of about 120 to about 600° C; and then

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contacting the oxygen treated catalyst with an aqueous medium, wherein the molecular sieve of the alkylation catalyst is PSH-3, SSZ-25, MCM-36, MCM-49, MCM-56, faujasite, mordenite or zeolite beta. *B'*

AMENDMENT UNDER 37 CFR § 1.111
Application No. 09/903,476

8 ~~20~~⁷. The process of claim ~~19~~⁷ wherein contacting the oxygen treated catalyst with the aqueous medium is conducted in the liquid phase.

9 ~~21~~⁷. The process of claim ~~19~~⁷ wherein the alkylating agent includes an alkylating aliphatic group having 1 to 5 carbon atoms.

B3 10 ~~22~~⁷. The process of claim ~~19~~⁷ wherein the alkylating agent is ethylene or propylene and the alkylatable aromatic compound is benzene.

11 ~~23~~⁷. The process of claim ~~19~~⁷ further including calcining the aqueous medium contacted catalyst at a temperature of about 25 to about 600° C for a period of about 10 minutes to about 48 hours.

24. The process of claim 19 wherein the aqueous medium is ammonium nitrate solution, ammonium carbonate solution or acetic acid solution.